

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of : Customer Number: 20277  
Sergey N. RAZUMOV : Confirmation Number: 4460  
Application No.: 10/762,375 : Tech Center Art Unit: 3625  
Filed: January 23, 2004 : Examiner: A. A. Shah  
:  
For: MULTIMEDIA TERMINAL FOR PRODUCT ORDERING

**TRANSMITTAL OF CORRECTED APPEAL BRIEF**

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

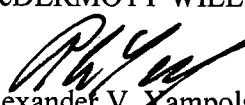
In response to the Notification of Non-Compliant Appeal Brief mailed on October 18, 2007, submitted herewith is Appellant's Corrected Appeal Brief in support of the Notice of Appeal filed July 30, 2007.

The Appeal Brief has been corrected to indicate which claims are appealed, and to identify each independent claim and show respective paragraphs of the specification and reference numbers of the drawings.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. 1.17 and 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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**CORRECTED APPEAL BRIEF**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed July 30, 2007, wherein Appellant appeals from the Primary Examiner's rejection of claims 29-43.

**Real Party In Interest**

This application is not assigned. The Real Party in Interest is Sergey N. Razumov, the sole inventor of the present application.

**Related Appeals and Interferences**

No other appeals or interferences are known to the Appellant, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**Status of Claims**

Claims 29-43 are pending. Claims 1-28 are cancelled. Claims 29-43 stand under final rejection, from which rejection this appeal is taken.

**Status of Amendments**

The application has not been amended after the final Office action.

**Summary of Claimed Subject Matter**

As shown in Fig. 2 and described on pages 7 and 8 of the specification, the claimed system for enabling a customer to order a required product may be implemented as a multimedia purchase ordering terminal 100 at a retail facility or another ordering point of a retail system. The ordering terminal 100 may include a processor 102, multimedia output devices 104, multimedia input devices 106, network interface and data communications devices 108, a voice recognition unit 110, a voice recording unit 112, and a memory 114 coupled to the processor for storing various data and sequences of instructions executed by the processor 102 to provide operations of the multimedia terminal 100.

As described in paragraph 25 of the specification, the multimedia output devices 104 may include a monitor 116 for presenting text and images, and voice output devices 118 such as speakers, earphones and headphones. The monitor may display a graphical user interface (GUI) for enabling a user to order products during a particular phase of a product ordering session.

As described on pages 8-15 of the specification and illustrated in FIG. 3, the voice recognition unit 110 may be implemented using voice recognition software that provides recognition of a large number of voice commands in real time. The monitor 116 may display objects graphically presenting users' commands available in a particular phase of the product ordering procedure. The objects

displayed on the monitor 116 in a particular phase of the product ordering procedure may be similar to voice commands available for the customer in that phase.

As described in paragraphs 39-41, a unique set of voice commands is established for each phase of the product ordering procedure. The voice recognition unit 110 determines whether or not a set of voice commands is established for a current phase of the product ordering session (block 208).

For example, during a point-of-sale (POS) selection phase, when the monitor 116 displays a POS selection screen enabling the customer to select a POS, to which the ordered purchase should be delivered, a set of voice commands may include POS keywords, and general voice commands relating to the POS selection such as "Zoom-In" and "Zoom-Out" to modify the scale of a map showing available points of sales.

During a delivery time selection phase, when the monitor 116 displays a delivery time selection screen enabling the customer to select a time for delivery the ordered purchase to the selected POS, a set of voice commands may include such voice commands as "Today", "Tomorrow", "Morning", "Afternoon", etc. that identify a time of delivery requested by the customer.

By restricting the number of recognizable voice commands in a particular phase of the product ordering session to a limited set of voice commands, the voice recognition unit 110 substantially improves voice recognition.

In addition, a limited set of voice commands available in a current phase of a product ordering session may be displayed by the monitor 116 during the respective phase to facilitate product ordering operations. For example, during a POS selection phase, the monitor 116 displays the POS selection screen that may contain a list of available points of sale. Each POS in the list may be identified in accordance with available POS keywords. Further, the POS selection screen may display a map showing available points of sales and buttons "Zoom-In" and "Zoom-Out" for modifying the scale of

this map. To operate the multimedia terminal 100 in the POS selection phase, the customer may either say a voice command of a set of available voice commands, or touch the appropriate button or point on the screen.

Similarly, the delivery time selection screen displayed in the delivery time selection phase of the product ordering session may contain buttons "Today", "Tomorrow", "Morning", "Afternoon", etc. to indicate available voice commands and enable the customer to operate the multimedia terminal either by voice commands or by touching appropriate buttons displayed on the screen.

As described in paragraph 50 of the specification, the multimedia product ordering terminal 100 of the present invention provides interaction between voice commands and images displayed on the monitor to facilitate a product ordering process. A screen displayed by the monitor in the respective phase of the product ordering session is associated with a particular set of voice commands available during the respective phase. Moreover, images on the screen may point out the available voice commands to customers to guide them through a product ordering session.

Independent claims 29, 36 and 40 are presented below with elements read on FIG. 2 of the drawings.

29. A system for enabling a customer to order a required product, comprising:

a voice recognition mechanism (110 in FIG. 2, paragraphs 24, 27-30, 32-50) for recognizing voice commands from the customer, and

a display mechanism (116 in FIG. 2, paragraphs 24, 25, 28-30, 32-50) responsive to the recognized voice commands for displaying images assisting the customer in ordering the product during a product ordering session,

the display mechanism being configured for displaying a first screen representing a first phase of the product ordering session and a second screen representing a second phase of the product ordering session, and

the voice recognition mechanism being configured to establish a first set of voice commands recognizable when the first screen is displayed, and a second set of voice commands recognizable when the second screen is displayed.

36. A system for enabling a customer to order a required product, comprising:

a voice recognition mechanism (110 in FIG. 2, paragraphs 24, 27-30, 32-50) for recognizing voice commands from the customer, and

a display mechanism (116 in FIG. 2, paragraphs 24, 25, 28-30, 32-50) responsive to the recognized voice commands for displaying images assisting the customer in ordering the product during a product ordering session,

the voice recognition mechanism being configured to establish a first set of voice commands recognizable during a first phase of the product ordering session, and a second set of voice commands recognizable during a second phase of the product ordering session, and

the display mechanism being configured for displaying a first set of images representing the first set of voice commands during the first phase of the product ordering session, and for displaying a second set of images representing the second set of voice commands during the second phase of the product ordering session.

40. A method of ordering a product using a terminal supplied with voice commands from a customer, the method comprising the steps of:

establishing a first set of voice commands executed by the terminal during a first phase of a product ordering session (paragraphs 39-41),

establishing a second set of voice commands executed by the terminal during a second phase of the product ordering session (paragraphs 39-41),

displaying a first set of images corresponding to the first set of voice commands during the first phase of the product ordering session (paragraphs 39-41 and 50), and

displaying a second set of images corresponding to the second set of voice commands during the second phase of the product ordering session (paragraphs 39-41 and 50).

A concise explanation of the subject matter defined in each of the claims 29, 36 and 40 is presented above.

#### Grounds of Rejection To Be Reviewed By Appeal

Whether claims 29-42 are anticipated by Sturr, Jr. (2004/0143512) under 35 U.S.C. 102(e)

#### Argument

Anticipation, under 35 U.S.C. § 102, requires that each element of a claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1920 (Fed. Cir. 1989) *cert. denied*, 110 S.Ct. 154 (1989). The term "anticipation," in the sense of 35 U.S.C. 102, has acquired the accepted definition meaning "the disclosure in the prior art of a thing substantially identical with the claimed invention." *In re Schaumann*, 572 F.2d 312, 197 USPQ 5 (CCPA 1978). The initial burden of establishing a basis for denying patentability to a claimed invention rests upon the Examiner. *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988); *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). To satisfy this burden, therefore, each and every element of the claimed invention must be shown by the Examiner to be disclosed in Sturr, Jr.

To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probability or possibilities. *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Appellant respectfully asserts that the record fails to meet these requirements.

In particular, independent claim 29 recites a system for enabling a customer to order a required product, comprising:

a voice recognition mechanism for recognizing voice commands from the customer, and

a display mechanism responsive to the recognized voice commands for displaying images assisting the customer in ordering the product during a product ordering session,

the display mechanism being configured for displaying a first screen representing a first phase of the product ordering session and a second screen representing a second phase of the product ordering session, and

the voice recognition mechanism being configured to establish a first set of voice commands recognizable when the first screen is displayed, and a second set of voice commands recognizable when the second screen is displayed.

The Examiner considers the commands “back to burger combination,” “no cheese,” “burger,” etc. in FIG. 4 of Sturr, and “back to combination,” “orange,” “iced tea,” etc. in FIG. 5 to correspond to the claimed first and second sets of voice commands.

However, the screens shown in FIGS. 4 and 5 of Sturr indicate “Please touch your Choice.” Accordingly, the commands in FIGS. 4 and 5 are graphic objects on a touch screen rather than voice commands, as the claim requires. Moreover, Sturr discloses that “in operation, a customer enters an order via a touch screen...” (the first sentence of paragraph 0027). In the description of FIGS. 4 and 5, the reference discloses that the user selects choices.

Hence, the reference does not disclose the claimed sets of voice commands.

It appears that the Examiner’s conclusion of anticipation is based on the following statement in the reference: *“other means for entering information may also be used including keyboards, touch panels, pen input devices, joysticks, mice, microphones and voice recognition and response systems and other suitable means of making a selection that can be recognized by a computer.”* (paragraph 0025).

It is respectfully submitted that this statement does not provide an express teaching that the graphic objects in FIGS. 4 and 5 are voice commands.

In the event the Examiner relied upon inherency without expressly indicating such reliance, the Examiner should be aware that inherency requires certainty, not speculation. *In re Rijckaert*, 9 F.3rd 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981); *In re Wilding*, 535 F.2d 631, 190 USPQ 59 (CCPA 1976). To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probability or possibilities. *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

The Examiner provided no factual basis upon which to conclude that the graphic objects in FIGS. 4 and 5 **necessarily** correspond to the claimed first set of voice commands recognizable when the first screen is displayed, and the claimed second set of voice commands recognizable when the second screen is displayed.

Moreover, it is respectfully submitted that one skilled in the art would realize that the above statement in the reference does not indicate that the graphic objects in FIGS. 4 and 5 are **necessarily** voice commands. Assuming that microphones and voice recognition and response systems of making a selection are used in the Sturr system, they would not **necessarily** require establishing one set of voice commands recognizable when the screen in FIG. 4 is displayed and another set of voice commands recognizable when the screen in FIG. 5 is displayed. For example, voice commands may be used without displaying the screens representing different phases of the ordering procedure, as the claims require.

It is noted that the reference provides no reason to conclude that voice commands are recognizable when the respective screens are displayed. The Examiner emphasizes the word “also” in the above statement in the reference. It appears that she believes that this word indicates that the other selection means are used in addition to the touch screen. This position is respectfully traversed.

The expression “other means for entering information may also be used...” may indicate that the other means may be used instead of the disclosed touch screen.

It is respectfully submitted that based on the Examiner’s logic, the statement *“other means for entering information may also be used including keyboards, touch panels, pen input devices, joysticks, mice, microphones and voice recognition and response systems and other suitable means of making a selection that can be recognized by a computer”* would indicate that keyboards, touch panels, pen

input devices, joysticks, etc. are simultaneously used in the terminal described in the reference. As one skilled in the art would recognize, such a combination of input devices would make no sense.

Accordingly, the statement in the reference does not indicate that recognizable voice commands are established in combination with displaying respective touch screens.

Hence, the reference neither expressly nor inherently discloses the subject matter of claim 29 that requires establishing a first set of voice commands recognizable when the first screen is displayed, and establishing a second set of voice commands recognizable when the second screen is displayed.

Moreover, claim 30 dependent from claim 29 recites that the first set of voice commands differs from the second set of voice commands.

Claim 31 dependent from claim 29 recites that the voice recognition mechanism is configured to recognize only voice commands of the first set when the first screen is displayed, and to recognize only voice commands of the second set when the second screen is displayed.

It is respectfully submitted that the Examiner misrepresented the reference in the sections of the Office Action addressing these claims.

In particular, the Examiner contends that the reference discloses that "...instead of the customer touching the screen from the option presented, the voice recognition mechanism can be used so that only voice commands of the options uniquely presented on the first set are recognized and only voice commands of the options uniquely represented on the second set are recognized."

The Examiner did not point out specifically wherein the reference contains a disclosure supporting this conclusion. However, as discussed above, the Examiner's assertion is based on speculation having no support in the reference.

Moreover, it is noted that the Examiner asserts that instead of touch screen, voice recognition can be used in the Sturr, Jr. system. Accordingly, the Examiner admits that voice commands would be established without displaying respective screens.

However, even assuming *arguendo* that voice commands are set in combination with displaying graphical objects of Sturr, Jr., the claimed invention would not result. The reference provides no reason to establish unique first and second sets of voice commands, where the first set is recognizable only when a first screen is displayed, and the second set is recognizable only when a second screen is displayed. Instead, a common set of voice commands may be set for all ordering phases.

It is noted that the reference does not discuss any advantages of establishing unique sets of voice commands recognizable only during respective ordering phases. Therefore, it gives no reason to conclude that the unique sets of voice commands for different ordering phases are established.

Hence, the reference neither expressly nor inherently discloses the subject matter of claims 30 and 31.

Independent claim 36 recites *inter alia* the voice recognition mechanism configured to establish a first set of voice commands recognizable during a first phase of the product ordering session, and a second set of voice commands recognizable during a second phase of the product ordering session, and the display mechanism configured for **displaying a first set of images representing the first set of voice commands during the first phase** of the product ordering session, and for **displaying a second set of images representing the second set of voice commands during the second phase** of the product ordering session.

Independent claim 40 recites similar steps.

The Examiner did not address the subject matter of claims 36 and 40. However, she addressed similar limitations in claim 32 dependent from claim 29 using the same arguments as the arguments discussed above in connection with claim 29.

It is respectfully submitted that the reference does not expressly disclose that the graphical objects in FIGS. 4 and 5 represent the respective sets of voice commands. Moreover, as discussed above, one skilled in the art would realize that the graphical objects in FIGS. 4 and 5 are not **necessarily** accompanied by the respective sets of voice commands.

Accordingly, Sturr, Jr. neither expressly nor inherently discloses the subject matter of independent claims 36 and 40.

Moreover, the Examiner has failed to point out specifically wherein Sturr, Jr. discloses the features of the dependent claims 33 and 34. Instead she relies upon FIGS. 1-13, and paragraph 0027 containing the entire description of the Sturr, Jr. system operation.

It is respectfully submitted that the reference neither expressly nor inherently discloses that:

-the display mechanism is configured to perform a predetermined operation in response to a voice command recognized by the voice recognition mechanism, and to perform the same predetermined operation in response to selection of a displayed image corresponding to the recognized voice command, as claim 33 recites; and

-the display mechanism is responsive to a recognized voice command to replace the first screen with the second screen, where the first and second screens represent non-consecutive phases of the product ordering session, as claim 34 requires.

Dependent claims 37-39 and 41-43 discloses features similar to the features discussed above. The reference neither expressly nor inherently discloses the subject matter of these claims.

**Conclusion**

For all of the foregoing reason, Appellant respectfully submits that the grounds of rejection of the claims on appeal is in error and should be reversed.

Respectfully submitted,

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**CLAIMS APPENDIX**

29. A system for enabling a customer to order a required product, comprising:  
a voice recognition mechanism for recognizing voice commands from the customer, and  
a display mechanism responsive to the recognized voice commands for displaying images  
assisting the customer in ordering the product during a product ordering session,  
the display mechanism being configured for displaying a first screen representing a first phase  
of the product ordering session and a second screen representing a second phase of the product  
ordering session, and  
the voice recognition mechanism being configured to establish a first set of voice commands  
recognizable when the first screen is displayed, and a second set of voice commands recognizable  
when the second screen is displayed.

30. The system of claim 29, wherein the first set of voice commands differs from the  
second set of voice commands.

31. The system of claim 29, wherein the voice recognition mechanism is configured to  
recognize only voice commands of the first set when the first screen is displayed, and to recognize only  
voice commands of the second set when the second screen is displayed.

32. The system of claim 29, wherein the display mechanism is configured to display a first  
set of images corresponding to the first set of voice commands when the first screen is displayed, and  
to display a second set of images corresponding to the second set of voice commands when the second  
screen is displayed.

33. The system of claim 32, wherein the display mechanism is configured to perform a predetermined operation in response to a voice command recognized by the voice recognition mechanism, and to perform the same predetermined operation in response to selection of a displayed image corresponding to the recognized voice command.

34. The system of claim 29, wherein the display mechanism is responsive to a recognized voice command to replace the first screen with the second screen, where the first and second screens represent non-consecutive phases of the product ordering session.

35. The system of claim 29, wherein the voice recognition mechanism and the display mechanism are elements of a product ordering terminal in a retail facility.

36. A system for enabling a customer to order a required product, comprising:

- a voice recognition mechanism for recognizing voice commands from the customer, and
- a display mechanism responsive to the recognized voice commands for displaying images assisting the customer in ordering the product during a product ordering session,
- the voice recognition mechanism being configured to establish a first set of voice commands recognizable during a first phase of the product ordering session, and a second set of voice commands recognizable during a second phase of the product ordering session, and
- the display mechanism being configured for displaying a first set of images representing the first set of voice commands during the first phase of the product ordering session, and for displaying a second set of images representing the second set of voice commands during the second phase of the product ordering session.

37. The system of claim 36, wherein the first set of voice commands differs from the second set of voice commands.

38. The system of claim 36, wherein the voice recognition mechanism is configured to recognize only voice commands of the first set during the first phase of the product ordering session, and to recognize only voice commands of the second set during the second phase of the product ordering session.

39. The system of claim 36, wherein the display mechanism is configured to perform a predetermined operation in response to a voice command recognized by the voice recognition mechanism, and to perform the same predetermined operation in response to selection of a displayed image corresponding to the recognized voice command.

40. A method of ordering a product using a terminal supplied with voice commands from a customer, the method comprising the steps of:

establishing a first set of voice commands executed by the terminal during a first phase of a product ordering session,

establishing a second set of voice commands executed by the terminal during a second phase of the product ordering session,

displaying a first set of images corresponding to the first set of voice commands during the first phase of the product ordering session, and

displaying a second set of images corresponding to the second set of voice commands during the second phase of the product ordering session.

41. The method of claim 40, wherein the first set of voice commands differs from the second set of voice commands.

42. The method of claim 40, wherein only voice commands of the first set are executed during the first phase of the product ordering session, and only voice commands of the second set are executed during the second phase of the product ordering session.

43. The method of claim 40, wherein a predetermined operation is performed in response to a voice command of the supplied voice commands, and the same predetermined operation is performed in response to selection of a displayed image corresponding to the voice command.

**EVIDENCE APPENDIX**

Not applicable

**RELATED PROCEEDINGS APPENDIX**

Not applicable